REMARKS

Claims 11-15 remain in the application. Claims 1-10 have been cancelled. Applicant respectfully requests reconsideration in light of the remarks provided herein.

Applicant's invention provides an advance in interactive television broadcasting technology. The invention reduces the delay commonly seen when a viewer makes interactive selections on their television set. The invention also conserves bandwidth allowing broadcasters to broadcast more television programs and interactive content.

Conventional broadcasting systems broadcast a television program and its interactive content data concurrently. The interactive content data is repetitively broadcast during the program in a carousel type format. When a television viewer interacts with their television, the television receiver must wait to receive the appropriate content data in the carousel before the television screen can be updated. Applicant's invention reduces this interaction delay by scheduling and pre-transmitting a specific program. The specific program is then stored in local memory to be reproduced on the television screen when a message is received.

Applicant's invention includes a scheduling unit that schedules broadcast programs to be transmitted. The scheduling unit schedules all programs except specific programs, to be transmitted at the time they will be reproduced on television. Specific programs are scheduled to be broadcast before the time they are scheduled to be reproduced. The specific programs' start times are scheduled for a predetermined time period before their reproduction times. The specific programs' end times are scheduled to coincide with reproduction start time. A generation unit in the scheduling unit generates a first message for instructing a television program receiver to store the specific program and a second message for instructing the television program receiver to reproduce the stored program. A transmission unit transmits a control script and the first and the second

messages to the television receiver allowing the transmission unit to command the receiver to save the specific program and then reproduce the specific program.

Claims 11-15 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Willard* (U.S. Pat No. 6, 374,405) in view of *Delpuch et. al* (U.S. Patent No. 5,448,568).

Willard discloses a method for delivering modules to a receiver at scheduled delivery times (*Willard*, Column 10, Lines 40-44). In *Willard*, a module with a delivery time is provided to a broadcast station that formats the module into one or more packets (*Willard*, Column 10, Lines 45-48). The broadcast station transmits all of the packets except for one to the receiving station before the scheduled delivery time (*Willard*, Column 10, Lines 49-53). At the scheduled delivery time, the broadcast station transmits the one remaining packet (*Willard*, Column, Lines 53-55). This provides the receiver with the last packet the receiver needs to complete the module. The complete module is received at precisely the scheduled reproduction time allowing timely reproduction.

Delpuch discloses a device that compresses video and audio for transmission (*Delpuch*, Column 1, Lines 38-39). The compressed video and audio are formed into transport packets (*Delpuch*, Column 1, Lines 39-41). Interactive video associated with the compressed video and audio are compiled into functional modules, compressed, and formed into transport packets (*Delpuch*, Column 1, Lines 42-43). Signal modules are generated to condition television receivers to suspend or resume execution of an application (*Delpuch* Column 1, Lines 45-48). The signal modules are multiplexed in the packets stream to reprogram respective receivers to accommodate interactive program changes (*Delpuch*, Column 1, Lines 52-54). The signal modules cue the receiver when a non-interactive program is to be broadcast allowing the receiver to suspend execution of the interactive portion of the programming.

Claims 11-15 recite "a transmission unit (step) operable to transmit (a) the first messages for duration from the transmission starting time to the transmission finishing time of the specific program and (b) the second message in the reproduction time period of the specific program." The recital provides the transmission unit with a control feature. The transmission unit transmits the first message which commands the receiver to store the specific program and the second message to which commands the receiver to reproduce the program (Application claims 11-15, Scheduling Unit (Step) Recital).

The Office Action admits that *Willard* is silent as to a second message and performing control so that the specific message is reproduced when the second message is received (Office Action, Page 4, Lines 9-10). However, the Office Action asserts *Delpuch* discloses a transmission unit to transmit the second message in the reproduction time period (Office Action, Page 4 Lines 15 and 16).

The cited text, however does not disclose Applicant's recited second message.

Applicant's second message, as set forth in our independent claim "designates the receiving apparatus to reproduce the specific program." *Delpuch's* sole message is sent to suspend the interactive portion of a broadcast during a commercial (*Delpuch*, Column 11, Lines 15-19). The lack of disclosure of Applicant's second message in both *Willard* and *Delpuch* makes Claims 11-15 patentable over any combination of *Willard* and *Delpuch*.

Moreover, the Office Action asserts that it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the system of *Willard* to include generating and transmitting the second message, and performing control so that the specific program is reproduced in the case of receiving *Delpuch's* message (Office Action, Page 4 , Line

22 – Page 5 Line 2). Applicant submits this combination is not obvious, because it would render the *Willard* device not functional for its intended purpose.

> [I]t is generally settled that the change in prior art device which makes the device inoperable for its intended purpose cannot be considered to be an obvious change.
>
> *Hughes Aircraft Co. v. United States*, 215 U.S.P.Q. 787 (Ct.Cl. Trial Div. 1982)

As explained above, Willard's device transmits all packets of a module to a receiver retaining the final packet until the reproduction time. At that time, the last packet is sent allowing the receiver to reproduce the module. *Delpuch's* message commands a suspension of the execution of reproduction. If these devices were combined, Willard's reproduction would be suspended, negating the intended purpose of reproducing the complete module at precisely the reproduction time.

For the reasons stated above Applicant submits that Claims 11-15 are patentable and respectfully requests that this rejection be withdrawn.

If the Examiner believes a telephone interview will help further the prosecution of the case, he is respectfully requested to contact the undersigned attorney at the listed phone number.

Patent
42478-8900

I hereby certify that this correspondence is being transmitted via facsimile to the USPTO at **571-273-8300** on September 5, 2006.

By: Candy Neu

Signature

Dated: September 5, 2006

Very truly yours,

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